

We claim:

- 1 1. A thermal conducting material comprising:
2 a viscous matrix material; and
3 a distribution of carbon fibers within the matrix material.
- 1 2. The thermal conducting material of claim 1, wherein the carbon fibers are randomly
2 oriented in the viscous matrix material.
- 1 3. The thermal conducting material of claim 1, further including a second distribution of
2 thermally conductive particles within the viscous matrix material.
- 1 4. The thermal conducting material of claim 3, wherein the second distribution of thermally
2 conductive particles includes at least one particle selected from the group consisting of
3 aluminum nitride (AlN), aluminum oxide (Al₂O₃), boron nitride (BN), aluminum, and copper.
- 1 5. An information handling system comprising:
2 a memory device;
3 a processor device;
4 a thermal conducting material coupled to the processor device, including;
5 a viscous matrix material;
6 a distribution of carbon fibers within the viscous matrix material;
7 a heat transfer device coupled to the thermal conducting material; and
8 a system bus coupling the memory device and the processor device.
- 1 6. The information handling system of claim 5, wherein the amount of the distribution of
2 carbon fibers in the viscous matrix material is between about 10% - 20% by weight.
- 1 7. The information handling system of claim 5, wherein the viscous matrix material
2 includes a silicone oil based matrix material.

1 8. The information handling system of claim 5, further including a distribution of aluminum
2 nitride (AlN) particles within the viscous matrix material.

1 9. A method of manufacturing a heat transfer contact, comprising:
2 mixing a thermal conduction material, including;
3 selecting a volume of a viscous matrix material;
4 distributing a number of carbon fibers within the viscous matrix material;
5 spreading the thermal conduction material onto the surface to create a surface/thermal
6 conduction material interface;
7 contacting a heat transfer device to the thermal conduction material to create a heat
8 transfer device/thermal conduction material interface.

1 10. The method of claim 9, wherein providing a viscous material includes providing a
2 silicone oil based material.

1 11. The method of claim 9, wherein distributing a number of carbon fibers includes
2 distributing an amount of carbon fibers in the viscous matrix material that is between about 10%
3 - 20% by weight.

1 12. The method of claim 9, further including distributing an number of aluminum nitride
2 (AlN) particles within the viscous matrix material.

1 13. A method of manufacturing a thermal interface material comprising:
2 selecting a volume of a viscous matrix material; and
3 distributing a number of carbon fibers within the viscous matrix material.

1 14. The method of claim 13, wherein providing a viscous material includes providing a
2 silicone oil based viscous material.

1 15. The method of claim 13, wherein distributing a number of carbon fibers includes
2 distributing an amount of carbon fibers in the viscous matrix material that is between about 10%

3 - 20% by weight.

1 16. The method of claim 13, further including distributing an number of aluminum nitride
2 (AlN) particles within the viscous matrix material.

1 17. A method of cooling a surface, comprising:
2 conducting heat from the surface through a surface/thermal conduction material interface;
3 conducting heat through a thermal conduction material, wherein the thermal conduction
4 material includes a viscous matrix material with a distribution of carbon fibers within the viscous
5 matrix material; and
6 conducting heat through a thermal conduction material/heat transfer device interface.

1 18. The method of claim 17, wherein conducting heat through a thermal conduction material
2 includes conducting heat through a silicone oil based matrix material with a distribution of
3 carbon fibers within the silicone oil based matrix material.